December 15, 2006

Mr. Joseph Handy
Handy Family Trust
75 South Winooski Street
Burlington, Vermont 05401

RE: Site Investigation Report – Simon's Berlin
1060 Route 302, Berlin, Vermont
SMS Site #98-2558, Verterre Project No. 05-054

Dear Mr. Handy:

The Verterre Group, Inc.® (Verterre) has prepared the enclosed Site Investigation Report to detail the findings of recent subsurface investigation activities at Simon's Berlin at 1060 Route 302 in Berlin, Vermont (the SITE). Verterre installed soil borings to assess the extent of petroleum contamination at the SITE.

On December 14, 2005, Verterre installed a single soil boring which was completed as a monitor well (MW-1). It was clear from the advancement of this boring that groundwater would be deeper than twenty (20) feet therefore, Verterre ceased drilling and contacted Environmental Drilling of New York to complete additional monitor wells. Four (4) additional monitor wells were completed on September 27, 2006.

On October 6, 2006, Verterre returned to the SITE to collect groundwater samples for volatile organic compound (VOC) analyses by US EPA Method 8021. Two (2) of the five (5) monitor wells contained VOCs above Vermont Groundwater Enforcement Standards (VGES).

Verterre recommends conducting an additional round of groundwater samples from all wells in the spring of 2007. Please do not hesitate to contact me if you have any questions regarding the enclosed report. I can be reached at (802) 654-8663, ext. 106, or via e-mail at marthar@vterre.com.

Sincerely,
The Verterre Group, Inc.®

Martha Roy
Project Manager

cc: Mr. Ashley Desmond, VT SMS.
G:\05052 Gracey's\0106 SI report.doc

Phase (check one)	Type (check one)
✓ Initial Site Investigation	□ Work Scope
□ Corrective Action Feasibility Investigation	✓ Technical Report
□ Corrective Action Plan	□ PCF Reimbursement Request
□ Corrective Action Summary Report	□ General Correspondence
□ Operations & Monitoring Report	

INITIAL SITE INVESTIGATION REPORT
OCTOBER 2006

Simon's Berlin
Route 302
Berlin, Vermont

SMS Project Manager: Mr. Ashley Desmond
SMS # 98-2558
Verterre Project # 05054

Date Submitted: December 15, 2006

Report Prepared for:
Mr. Joseph Handy
Handy Family Trust
75 South Winooski Street
Burlington, Vermont 05401

Written By: _____
Martha Roy, Project Manager

Reviewed By: _____
Steven Chase, Staff Scientist

1.0 INTRODUCTION AND BACKGROUND

This report was prepared by The Verterre Group, Inc.® (Verterre) on behalf of Mr. Joseph Handy to present the findings of our recent Site Investigation conducted at Simon's Berlin (the SITE). The SITE is located at 1060 VT Route 302 in Berlin, Washington County, Vermont (as shown on the SITE Location Map, **Figure 1**, and SITE Plan, **Figure 2**). The SITE is currently used as a retail gasoline station, convenience store and Dunkin Donuts Store.

On September 29 and 30, 1998, five (5) gasoline underground storage tanks (USTs) were removed from the SITE. During the site activities, screened soils had concentrations up to 141 parts per million (ppm) as measured by a photoionization detector (PID). The peak PID readings were measured at depths of 8 to 11 feet below ground surface (fbgs) in the excavation. The limits of soil contamination were not defined. All soil was used for backfill. As a result, the State of Vermont Sites Management Section (SMS) requested a subsurface investigation. Verterre conducted a subsurface investigation in January 2006, the results of which are summarized in this report.

2.0 COMPLETED WORK SCOPE

The following activities were performed as part of this Site Investigation:

- Review of files at the Vermont Department of Environmental Conservation documenting past UST work;
- Clearance of the Site and vicinity for underground utilities by contacting Dig Safe;
- Advancement of five (5) on-SITE wells;
- Field screening of soil samples for the presence of volatile organic compounds (VOCs) with a PID;
- Collection of water samples for laboratory analysis of VOCs via US EPA Method 8021;
- Surveying of the soil borings, monitor wells, potential receptors, and important SITE features;
- Development of a SITE map including the pertinent surveyed features; and,
- Preparation of this SITE Investigation Report with findings, conclusions, and recommendations.

3.0 SUBSURFACE INVESTIGATION PROCEDURES

The primary objective of the subsurface investigation was to evaluate the extent of contamination and to determine potential impact to area receptors. To accomplish these objectives, Verterre installed soil borings/monitor wells, conducted a site survey, and collected groundwater samples for laboratory analysis.

3.1 Advancement of Soil Borings

On December 14, 2005, Verterre installed a single soil boring which was completed as a monitor well (MW-1). It was clear from the advancement of this boring that groundwater would be deeper than twenty (20) feet therefore, Verterre ceased drilling and contacted Environmental Drilling of New York to complete additional monitor wells. Four (4) additional monitor wells were completed on September 27, 2006.

A total of five (5) monitor wells have been completed in the locations shown on **Figure 2**. Logs for these borings are presented in **Appendix A**. These borings were advanced to depths ranging from approximately 22 to 24 feet below ground surface (bgs). All borings were logged, describing soil strata conditions, and field screened for VOCs with a PID using conventional headspace techniques. A Thermo Environmental Instruments Model 580B Organic Vapor Meter with a 10.6 eV photoionizing lamp was employed to detect the presence of VOCs. The PID was calibrated to a 100-ppmv isobutylene standard, referenced to benzene.

BORING SUMMARY TABLE

Boring ID	Boring Location	Completed as Monitor Well	Depth of Boring (feet bgs) Max PID Reading (ppmv)
B-1	Approximately 65 feet southeast of the current pump island.	MW-1	Depth: 24 Max PID: 2 (16-20 feet)
B-101	Approximately 35 feet west of the current pump island.	MW-2	Depth: 22 Max PID: 33 (12-14 feet)
B-102	Approximately 30 feet northwest of the current pump island.	MW-3	Depth: 22 Max PID: 19.7 (10-12 feet)
B-103	Approximately 60 feet northeast of the current pump island.	MW-4	Depth: 22 Max PID: 7.8 (16-18 feet)
B-104	Approximately 85 feet northeast of the current pump island.	MW-5	Depth: 22 Max PID: 2.3 (12-14 feet)

3.2 Site Geology

Based on the soil boring evaluation, the general soil stratigraphy of the SITE (near borings) consists of sand and gravel. For a more detailed description of geological units, see the Boring Logs in **Appendix A**.

3.3 Site Survey

Following the subsurface investigation, a SITE survey was conducted on October 6, 2006. A Topcon AT-G6 auto level was used to perform a stadia survey to identify the location of the soil borings and other pertinent SITE features. The collected data was used to create the SITE Plan (**Figure 2**).

4.0 GROUNDWATER SAMPLING

4.1 Water Table Elevation and Groundwater Flow Direction

On October 6, 2006, depth to water levels ranged from 15.70 to 17.24 feet bgs in MW-5 and MW-1, respectively.

Groundwater underlying the SITE at the time of sampling was calculated to flow in a northerly direction. The calculated hydraulic gradient between MW-1 and the 82.2 foot contour line was 0.002

feet/foot. The groundwater elevation data is summarized on **Table 1**. A Groundwater Contour Plan is presented as **Figure 3**.

4.2 Groundwater Sampling

Verterre returned to the SITE on October 6, 2006 to collect groundwater samples for laboratory analysis. The samples were submitted for VOC analysis via US EPA Method 8021.

Resource Laboratories of Portsmouth, New Hampshire, performed all laboratory analyses for this investigation. The analytical results are discussed in **Section 5.0**.

5.0 ANALYTICAL RESULTS

5.1 Analytical Results

The October 2006 sampling results are summarized on **Table 2**. The complete analytical laboratory report for the January 2006 samples is provided in **Attachment 1** and a Contaminant Distribution Plan is presented as **Figure 4**.

The maximum concentration of contaminants of concern (COCs) were reported in MW-4 at a concentration of 2,908 micrograms per liter (µg/l). MW-4 is located approximately 60 feet northeast of the current pump island approximately 15 feet to the north or the current USTs. COCs were also reported above the method detection limits (MDLs) in MW-2 (262 µg/l), MW-3 (27 µg/l) and MW-5 (8 µg/l). COCs were not reported above the MDLs in MW-1.

The maximum concentration of benzene was reported in MW-4 at a concentration of 170 µg/l. This concentration is above the Vermont Groundwater Enforcement Standard (VGES) of 5 µg/l. Benzene was also reported above the VGES in MW-2 (52 µg/l). Benzene was reported above the MDL in any other sampled well.

Toluene was not reported above the MDL in any sampled well.

Ethylbenzene was reported in MW-4 at 160 µg/l. This concentration is below the VGES of 700 µg/l for ethylbenzene. Ethylbenzene was not reported above the MDL in any other sampled well.

The maximum concentration of total xylenes was reported in MW-4 at 1,300 µg/l. This concentration is below the VGES of 10,000 µg/l for total xylenes. Total xylenes were also reported below the VGES in MW-2 (75 µg/l). Total xylenes were not reported above the MDL in any other sampled well.

The maximum concentration of methyl tert butyl ether (MTBE) was reported in MW-4 at 350 µg/l. This concentration is above the VGES of 40 µg/l. MTBE was reported above the VGES in MW-2 (61 µg/l). MTBE was reported above the MDL but below the VGES in MW-3 (27 µg/l) and MW-5 (8 µg/l). MTBE was not reported above the MDL in MW-1.

The maximum concentration of 1,3,5-trimethylbenzene (135 TMB) was reported in MW-4 at 190 µg/l. This concentration is above the VGES of 4.0 µg/l for 135 TMB. 135 TMB was also reported above the VGES in MW-2 (23 µg/l). 135 TMB was not reported above the MDL in any other sampled well.

The maximum concentration of 1,2,4-trimethylbenzene (124 TMB) was reported in MW-4 at 650 µg/l. This concentrations is above the VGES of 5.0 µg/l for 124 TMB. 124 TMB was also reported above the VGES in MW-2 (51 µg/l). 124 TMB was not reported above the MDL in any other sampled well.

The maximum concentration of naphthalene was reported in MW-4 at 88 µg/l. This concentration is above the VGES of 20 µg/l for naphthalene. Naphthalene was not reported above the MDL in any other sampled well.

5.2 QA/QC Results

The Relative Percent Difference (RPD) for total COCs between MW-3 and its duplicate, DUP-1 was not calculated because some results were less than 10 times the MDLs. An RPD of up to 25% is generally considered acceptable for precision.

The laboratory data was evaluated for the following parameters prior to acceptance in this report:

- Correct sample ID's;
- Analysis date within method specified holding times;
- Acceptable detection limit multipliers;
- Acceptable matrix spike (MS) and matrix spike duplicate (MSD) recoveries, where applicable;
- Acceptable RPD between the MS and MSD, where applicable; and,
- Acceptable surrogate recoveries.

Based on Verterre's evaluation of these parameters, the data was determined to be acceptable.

6.0 RECEPTOR EVALUATION

Sensitive receptors on and in the vicinity of the SITE include: soil, groundwater, surface waters, area supply wells, and utility corridors. The building is on a concrete slab. Homes and businesses in the area are on municipal water and sewer.

The Stevens Branch River is located 25 feet to the northeast (see **Figure 2**).

Based on the Private Well Locator interactive map on the Vermont Agency of Natural Resources website, there are 15 supply wells located within a ½ mile radius of the SITE. The closest well is located approximately 780 feet to the northeast across the Stevens Branch.

7.0 FINDINGS AND CONCLUSIONS

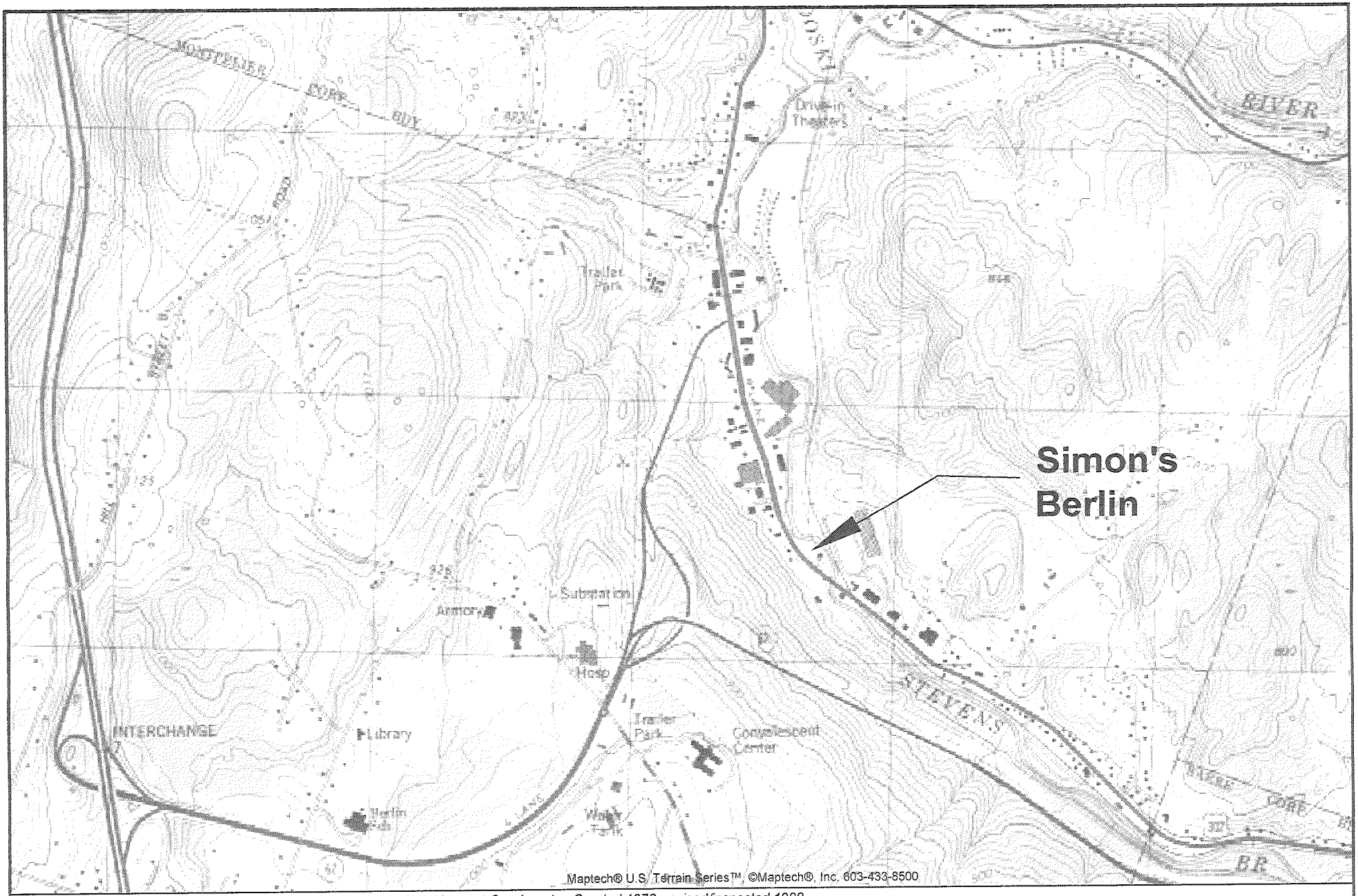
Based on the investigation results, Verterre provides the following findings and conclusions regarding this SITE:

- Five (5) soil borings were advanced to define the degree and extent of contamination;
- Five (5) of these borings were completed as groundwater monitoring wells;
- A SITE survey was completed, and borings, the monitor wells, and additional features were added to the SITE map;
- Groundwater has been interpreted to flow northerly across the SITE;
- VOC concentrations exceed the VGES in two (2) of the five (5) monitor wells;
- Threatened and impacted receptors associated with the SITE primarily include soil and groundwater beneath the SITE and utility corridors.

8.0 RECOMMENDATIONS

Verterre recommends conducting an additional round of groundwater samples from all wells in the spring of 2007.

FIGURES



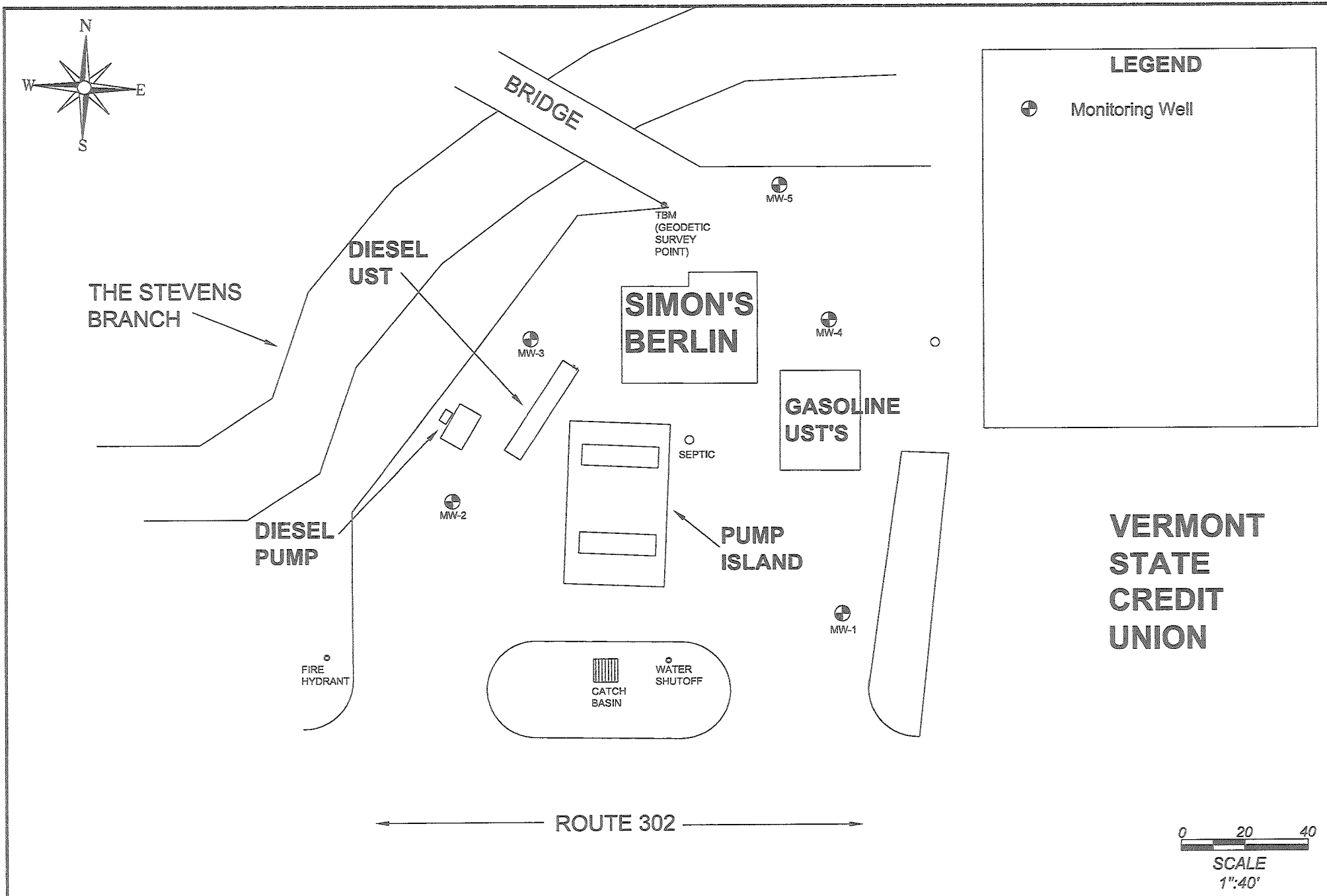
SOURCE: USGS 7.5' Minute Topographic Map Series Barre-West, Vermont Quadrangle. Created 1978, revised/inspected 1988.

Fs1:/project/05054/Site Location Map.dwg

N
W E
S

Project #05054	DRAWN BY: SRC CHECKED BY: MER APPROVED BY: ____ DATE: 12/08/06 SCALE: 1" = 1,000'	**The Verterre Group, Inc.®** 414 Roosevelt Highway - Suite 200 Colchester, Vermont 05446 (802) 654-8663	**FIGURE 1** **SITE LOCATION MAP** Simon's Berlin 1060 Route 302 Berlin, Vermont

\\Fs1\c\Project\05054 Handy's Berlin\Site Location Map.dwg, 12/8/2006 2:08:45 PM



FS1:\PROJECT\05054\SITE PLAN.DWG

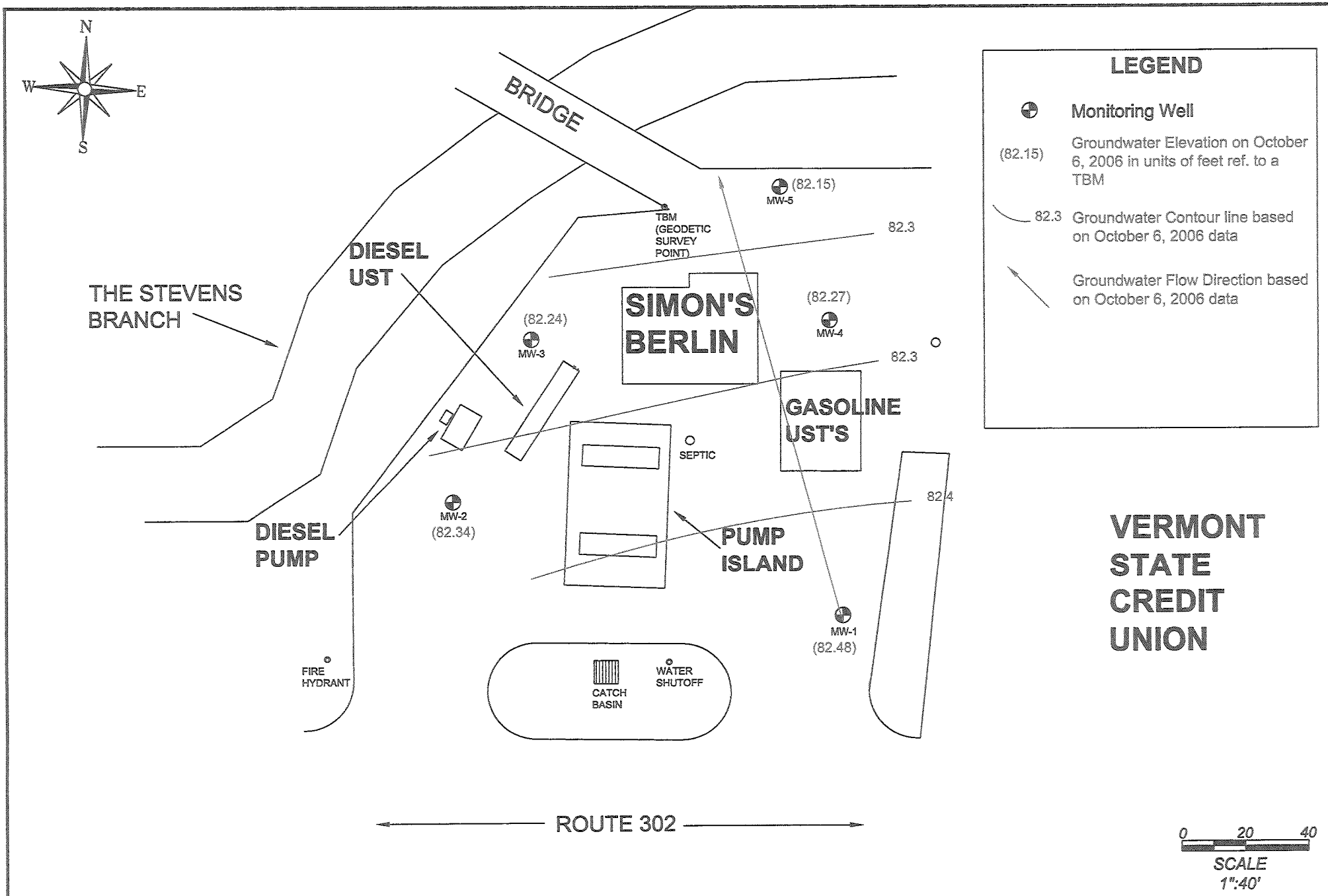
Verterre Project #05054

DRAWN BY:	SRC
CHECKED BY:	MR
APPROVED BY:	
DATE:	12/13/06
SCALE:	1" = 40'

THE VERTERRE GROUP, INC®
414 Roosevelt Highway - Suite 200
Colchester, Vermont 05446
(802) 654-8663

FIGURE 2
SITE PLAN

Simon's Berlin
Berlin, Vermont



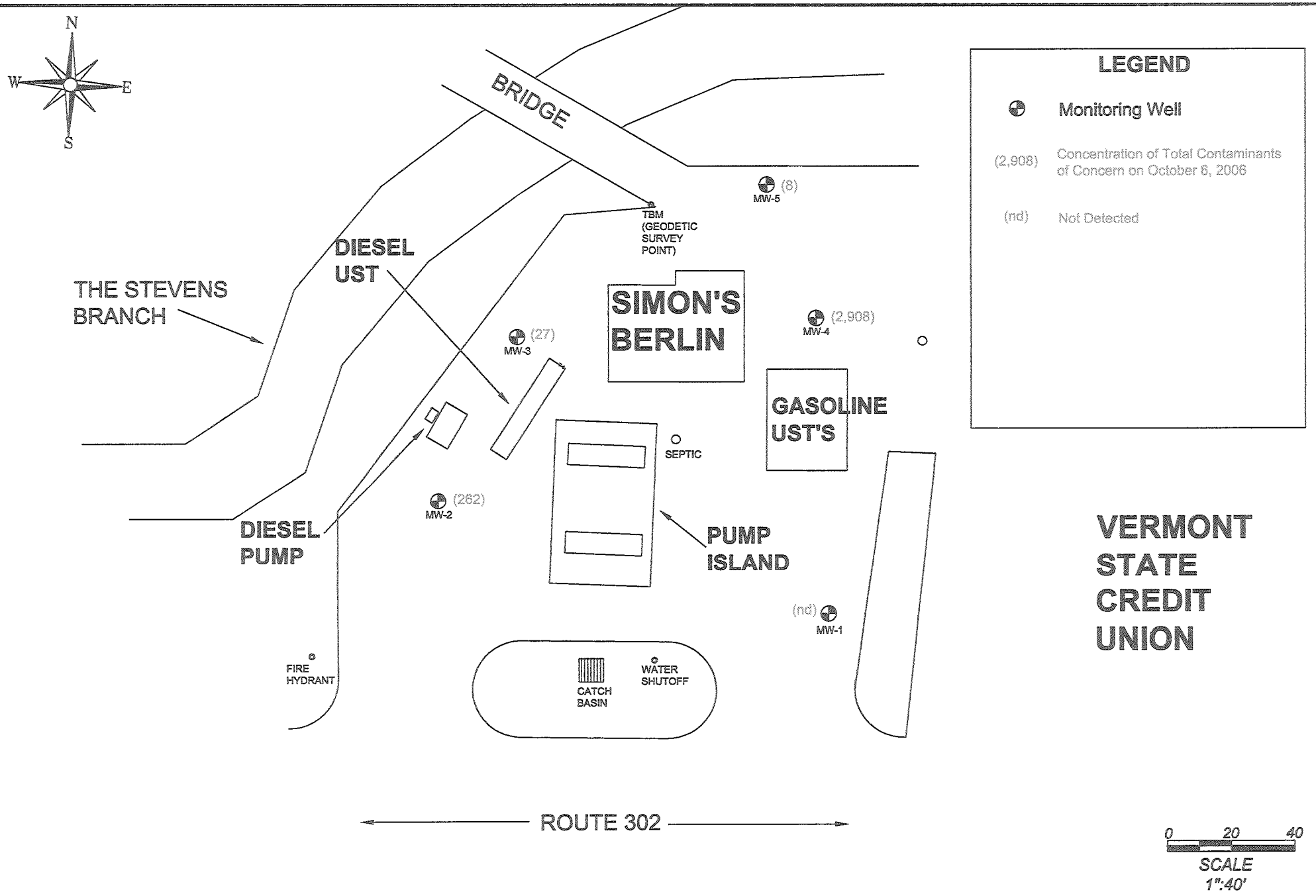
FS1:\PROJECT\05054\SITE PLAN.DWG

Verterre Project #05054

DRAWN BY: SRC
CHECKED BY: MR
APPROVED BY:
DATE: 12/13/06
SCALE: 1" = 40'

THE VERTERRE GROUP, INC®
414 Roosevelt Highway - Suite 200
Colchester, Vermont 05446
(802) 654-8663

FIGURE 3
GROUNDWATER CONTOUR PLAN
October 6, 2006
Simon's Berlin
Berlin, Vermont



FS1:\PROJECT\05054\SITE PLAN.DWG

Verterre Project #05054

DRAWN BY: SRC
CHECKED BY: MR
APPROVED BY:
DATE: 12/13/06
SCALE: 1" = 40'

THE VERTERRE GROUP, INC®
414 Roosevelt Highway - Suite 200
Colchester, Vermont 05446
(802) 654-8663

FIGURE 4
COC DISTRIBUTION PLAN
October 6, 2006
Simon's Berlin
Berlin, Vermont

TABLES

TABLE 1

Simon's Berlin
Berlin, Vermont

Summary of Groundwater Elevations

October 6, 2006

Well Identification	Top of Riser Elevation	Depth to Product	Depth to Water	Depth of Well	Thickness of Water in Well	Water Table Elev.
MW-1	99.72	ND	17.24	23.40	6.16	82.48
MW-2	98.29	ND	15.95	21.80	5.85	82.34
MW-3	98.49	ND	16.25	21.75	5.50	82.24
MW-4	98.38	ND	16.11	21.53	5.42	82.27
MW-5	97.85	ND	15.70	21.70	6.00	82.15

Notes:
1. Elevation data is referenced to a TBM. Units are in feet.
2. ND - not detected.
3. NM - not measured.
4. Measurements recorded are referenced to a marking on top of PVC riser for each well.
5. Depth to fluid measurements were obtained using a Solinst Interface Probe.

The Verterre Group, Inc®

TABLE 2

SUMMARY OF GROUNDWATER QUALITY

Simon's Berlin
Berlin, Vermont

October 6, 2006

Compound	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Naphthalene	Total COC
Sample ID	Concentration (ug/L)								
MW-1	<2	<2	<2	<4	<2	<2	<2	<5	nd
MW-2	***52***	<2	<2	75	***61***	***23***	***51***	<5	262
MW-3	<2	<2	<2	<4	27	<2	<2	<5	27
MW-4	***170***	<10	160	1,300	***350***	***190***	***650***	***88***	2,908
MW-5	<2	<2	<2	<4	8	<2	<2	<5	8
DUP-1	<2	<2	<2	<4	28	<2	<2	<5	28
Field Blank	<2	<2	<2	<4	<2	<2	<2	<5	nd
VGES	5.0	1,000	700	10,000	40.0	4.0	5.0	20.0	ne

Notes:

1. VGES - Vermont Groundwater Enforcement Standard.
2. All samples were analyzed for 8021 VOCs via US EPA Method 8260.
3. ne - VGES not established.
4. **Bold** and *italic* numbers indicate concentrations that exceed VGES.
5. DUP-1 Duplicate sample of monitoring well MW-3. Collected for Quality Assurance/Quality Control.
6. ns - not sampled, nt - not tested, COC - contaminants of concern.
7. MW-1 installed on December 14, 2005 by Verterre.
8. MW-2 - MW-5 installed on September 27, 2006 by Verterre.

Relative Percent Difference

The RPD for total COC and MTBE between MW-3 and DUP-1 was not calculated because the results were less than 10 times the MDL.

The Verterre Group, Inc.®

APPENDIX A

THE VERTERRE GROUP, INC
Environmental Engineers and Planners
The Verterre Group, Inc.®
414 Roosevelt Highway Colchester, Vermont 05446
(802) 654-8663 FAX: (802) 654-8667

MONITORING WELL/SOIL BORING LOG

Project Name: **Simon's Berlin Store**
Location: **1060 Route 302, Berlin, Vermont**
Verterre Project #: **05054**

WELL/ BORING ID: MW-1/B-1

INSTALL DATE:	December 14, 2005	WELL DEPTH: 24 ft bgs	BORING DEPTH: 24 ft bgs
VERTERRE REP:	Rod Lindsay	DEPTH TO WATER: (during drilling)	Approximately 16 ft bgs
DRILLING CO:	Verterre Colchester, VT	SCREEN DIA: 1 inch	DEPTH: 9-24 ft bgs
		SCREEN TYPE/SIZE:	0.010"-slot Schedule 40 PVC
DRILLING METHOD:	Geoprobe® Tools	RISER TYPE:	40 Schedule PVC
SAMPLING METHOD:	Macrocore	RISER DIA.: 1 inch	DEPTH: 0-9 ft bgs
REFERENCE POINT (RP):	Top of casing	GUARD TYPE:	Aluminum road box
ELEVATION OF RP:	99.72 ft	RISER CAP:	Locking expansion plug
REMARKS:	Boring completed as a monitoring well.		

DEPTH IN FEET	WELL PROFILE	SAMPLE DEPTH (FT)	PID (PPMV)	BLOWS/6" AND RECOVERY	SOIL DESCRIPTION AND NOTES*
0		0-4	<0.1	36" recovery	0-3": ASPHALT. 3-23": SAND, fine to coarse, brown, some silt. 23-36": SILT and very fine sand, dry to moist.
4		4-8	<0.1		SILT, fine, brown, some gravel, wet.
8		8-12	0.7	18" recovery	0-18": SILT, brown, some gravel, moist.
12		12-16	1.3	40" recovery	0-40": SILT, brown, some gravel, some wood debris; some cobble; moist to wet.
16 ▼		16-20	2.0	42" recovery	0-24": SILT, brown, some gravel, some wood debris. 24-42": SAND, medium to coarse, gray; saturated.
20		20-24	1.4	48" recovery	0-48": SAND, fine to coarse, gray; some gravel; trace silt; saturated.

LEGEND: CEMENT GROUT; NATIVE BACKFILL; BENTONITE SEAL; SAND PACK; WELL SCREEN; RISER PIPE; HS HEAD SPACE; ▼ WATER LEVEL (APPROXIMATE)

GRANULAR SOILS	
BLOWS/FT	DENSITY
0-4	V.LOOSE
4-10	LOOSE
10-30	M.DENSE
30-50	DENSE
>50	V.DENSE

COHESIVE SOILS	
BLOWS/FT	DENSITY
<2	V.SOFT
2-4	SOFT
4-8	M.STIFF
8-15	STIFF
15-30	V.STIFF
>30	HARD

PROPORTIONS USED	
TRACE	0-10%
LITTLE	10-20%
SOME	20-35%
AND	35-50%

NOTES: See Figure 2, Site Plan, for boring location.

THE VERTERRE GROUP, INC
Environmental Scientists and Engineers
The Verterre Group, Inc.®
414 Roosevelt Highway Colchester, Vermont 05446
(802) 654-8663 FAX: (802) 654-8667

MONITORING WELL/SOIL BORING LOG

Project Name: **Simon's Berlin Store**
Location: **1060 Route 302, Berlin, Vermont**
Verterre Project #: **05054**

WELL/ BORING ID: MW-2/B-101

INSTALL DATE:	September 27, 2006	WELL DEPTH: 22 ft bgs	BORING DEPTH: 22 ft bgs
VERTERRE REP:	Steven Chase	DEPTH TO WATER: (during drilling)	Approximately 16 ft bgs
DRILLING CO:	Environmental Drilling Glens Falls, NY	SCREEN DIA: 2 inch	DEPTH: 12-22 ft bgs
		SCREEN TYPE/SIZE:	0.010"-slot Schedule 40 PVC
DRILLING METHOD:	Auger	RISER TYPE:	40 Schedule PVC
SAMPLING METHOD:	Split Spoon	RISER DIA.: 2 inch	DEPTH: 0-12 ft bgs
REFERENCE POINT (RP):	Top of casing	GUARD TYPE:	Aluminum road box
ELEVATION OF RP:	98.29 ft	RISER CAP:	Locking expansion plug
REMARKS:	Boring completed as a monitoring well.		

DEPTH IN FEET	WELL PROFILE	SAMPLE DEPTH (FT)	PID (PPMV)	BLOWS/6" AND RECOVERY	SOIL DESCRIPTION AND NOTES*
0		0-2	1.3	12" recovery	0-12": Gray silt, dense some fine brown sand.
1					
2		2-4	1.5	13" recovery	0-13": Gray silt, dense some fine brown sand.
3					
4		4-6	2.3	16" recovery	0-16": Gray silt, some fine brown sand, trace gravel, moist.
5					
6		6-8	10	17" recovery	0-17": Gray silt, some fine brown sand, trace gravel, moist.
7					
8		8-10	22.6	16" recovery	0-16": Very fine gray sand, trace moist cobble, some silt.
9					
10		10-12	30.5	18" recovery	0-18": Very fine gray sand, trace moist cobble, some silt.
11					
12		12-14	33.0	20" recovery	0-16": Very fine gray sand, trace moist cobble, some silt. 18-20": Very fine gray to white sand.
13					
14		14-16	25.4	16" recovery	0-5": Sand, medium to coarse, white to gray. 5-12": Fine gray sand, some coarse. 12-16": Sand, medium to coarse, white to gray, moist, tip was wet.
15					
16		16-18	11.2	15" recovery	0-15": Fine to coarse, trace silt, trace cobble, saturated.
17					
18		18-20	2.3	12" recovery	0-7": Gray gravel. 7-12": Dense gray silt, saturated.
19					
20		20-22	1.9	10" recovery	0-10": Dense gray silt, some large cobble.
21					
22					
23					
24					
25					

LEGEND: CEMENT GROUT; NATIVE BACKFILL; BENTONITE SEAL; SAND PACK; WELL SCREEN; RISER PIPE; HS HEAD SPACE; WATER LEVEL (APPROXIMATE)

GRANULAR SOILS	
BLOWS/FT	DENSITY
0-4	V.LOOSE
4-10	LOOSE
10-30	M.DENSE
30-50	DENSE
>50	V.DENSE

COHESIVE SOILS	
BLOWS/FT	DENSITY
<2	V.SOFT
2-4	SOFT
4-8	M.STIFF
8-15	STIFF
15-30	V.STIFF
>30	HARD

PROPORTIONS USED	
TRACE	0-10%
LITTLE	10-20%
SOME	20-35%
AND	35-50%

NOTES: See Figure 2, Site Plan, for boring location.

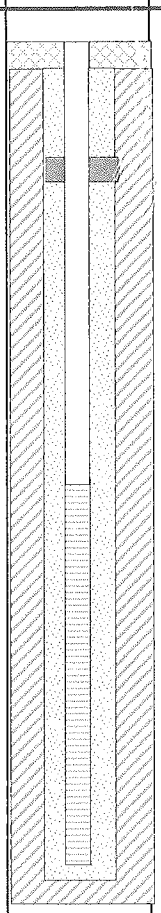
THE VERTERRE GROUP, INC
Environmental Scientists and Engineers
The Verterre Group, Inc.®
414 Roosevelt Highway Colchester, Vermont 05446
(802) 654-8663 FAX: (802) 654-8667

MONITORING WELL/SOIL BORING LOG

Project Name: **Simon's Berlin Store**
Location: **1060 Route 302**
Berlin, Vermont
Verterre Project #: **05054**

WELL/
BORING ID:
MW-3/B-102

INSTALL DATE:	September 27, 2006	WELL DEPTH: 22 ft bgs	BORING DEPTH: 22 ft bgs
VERTERRE REP:	Steven Chase	DEPTH TO WATER: (during drilling)	Approximately 16 ft bgs
DRILLING CO:	Environmental Drilling Glens Falls, NY	SCREEN DIA: 2 inch	DEPTH: 12-22 ft bgs
		SCREEN TYPE/SIZE:	0.010"-slot Schedule 40 PVC
DRILLING METHOD:	Auger	RISER TYPE:	40 Schedule PVC
SAMPLING METHOD:	Split Spoon	RISER DIA.: 2 inch	DEPTH: 0-12 ft bgs
REFERENCE POINT (RP):	Top of casing	GUARD TYPE:	Aluminum road box
ELEVATION OF RP:	98.49 ft	RISER CAP:	Locking expansion plug
REMARKS:	Boring completed as a monitoring well.		

DEPTH IN FEET	WELL PROFILE	SAMPLE DEPTH (FT)	PID (PPMV)	BLOWS/6" AND RECOVERY	SOIL DESCRIPTION AND NOTES*
0		0-2	16.3	12" recovery	0-10": Gray silt, with small cobble. 10-12": Brown sand, fine to medium.
1					
2		2-4	11.0	12" recovery	0-6": Brown sandy gravel. 6-12": Brown silt and very fine sand.
3					
4		4-6	6.3	14" recovery	0-14": Dense gray silt, some coarse brown sand with trace gravel, moist.
5					
6		6-8	7.0	16" recovery	0-16": Dense gray silt, some coarse brown sand with trace gravel, moist.
7					
8		8-10	6.7	9" recovery	0-9": Dense gray silt with some fine brown sand, moist.
9					
10		10-12	19.7	11" recovery	0-11": Gray silt mixed with very fine gray sand and woody debris.
11					
12		12-14	11.0	16" recovery	0-5": Gray silt with fine sand. 5-16": Sand, very fine to coarse, some silt and wood debris.
13					
14		14-16	6.3	16" recovery	0-16": Sand, fine to coarse, gray and white, wet at tip.
15					
16 ▼		16-18	5.7	12" recovery	0-12": Gray sand, fine to medium, some silt, trace gravel, saturated.
17					
18		18-20	4.5	9" recovery	0-3": Sandy gravel. 3-9": Dense packed gray silt.
19					
20		20-22	2.3	18" recovery	0-6": Sandy gravel. 6-18": Dense gray silt, some fine sand, saturated.
21					
22					
23					
24					
25					

LEGEND
- CEMENT GROUT
- NATIVE BACKFILL
- BENTONITE SEAL
- SAND PACK
- WELL SCREEN
- RISER PIPE
- HS HEAD SPACE
- ▼ WATER LEVEL (APPROXIMATE)

GRANULAR SOILS	
BLOWS/FT	DENSITY
0-4	V.LOOSE
4-10	LOOSE
10-30	M.DENSE
30-50	DENSE
>50	V.DENSE

COHESIVE SOILS	
BLOWS/FT	DENSITY
<2	V.SOFT
2-4	SOFT
4-8	M.STIFF
8-15	STIFF
15-30	V.STIFF
>30	HARD

PROPORTIONS USED	
TRACE	0-10%
LITTLE	10-20%
SOME	20-35%
AND	35-50%

NOTES: See Figure 2, Site Plan, for boring location.

THE VERTERRE GROUP, INC
Environmental Scientists and Engineers
The Verterre Group, Inc.®
414 Roosevelt Highway Colchester, Vermont 05446
(802) 654-8663 FAX: (802) 654-8667

MONITORING WELL/SOIL BORING LOG

Project Name: **Simon's Berlin Store**
Location: **1060 Route 302, Berlin, Vermont**
Verterre Project #: **05054**

WELL/ BORING ID: MW-4/B-103

INSTALL DATE:	September 27, 2006	WELL DEPTH: 22 ft bgs	BORING DEPTH: 22 ft bgs
VERTERRE REP:	Steven Chase	DEPTH TO WATER: (during drilling)	Approximately 16 ft bgs
DRILLING CO:	Environmental Drilling Glens Falls, NY	SCREEN DIA: 2 inch	DEPTH: 12-22 ft bgs
		SCREEN TYPE/SIZE:	0.010"-slot Schedule 40 PVC
DRILLING METHOD:	Auger	RISER TYPE:	40 Schedule PVC
SAMPLING METHOD:	Split Spoon	RISER DIA.: 2 inch	DEPTH: 0-12 ft bgs
REFERENCE POINT (RP):	Top of casing	GUARD TYPE:	Aluminum road box
ELEVATION OF RP:	98.38 ft	RISER CAP:	Locking expansion plug
REMARKS:	Boring completed as a monitoring well.		

DEPTH IN FEET	WELL PROFILE	SAMPLE DEPTH (FT)	PID (PPMV)	BLOWS/6" AND RECOVERY	SOIL DESCRIPTION AND NOTES*
0		0-2	3.1	13" recovery	0-13": Fine brown sand, with some large cobble.
1					
2		2-4	3.9	8" recovery	0-8": Fine brown sand, with some large cobble.
3					
4		4-6	3.3	11" recovery	0-14": Fine brown sand, with some large cobble.
5					
6		6-8	2.5	18" recovery	0-18": Fine brown sand, small amount of silt.
7					
8		8-10	2.9	17" recovery	0-17": Fine brown sand, small amount of silt.
9					
10		10-12	2.5	12" recovery	0-12": Fine brown silt, with some fine to coarse brown sand.
11					
12		12-14	1.7	16" recovery	0-16": Fine to medium brown sand with some silts.
13					
14		14-16	6.1	14" recovery	0-12": Fine to medium brown sand with some silts, moist. 12-14": Fine gray sand, trace silt, wet
15					
16 ▼		16-18	7.8	15" recovery	0-7": Fine to coarse gray sand, some brown sand, some silt, wet, old petro odor. 7-9": Fine gray silt, wet, old petro odor. 9-15": Gray gravel with some silt, wet, old petro odor.
17					
18		18-20	0.7	8" recovery	0-8": Gray gravel and large cobble.
19					
20		20-22	3.7	14" recovery	0-14": Coarse gray sand and gravel.
21					
22					
23					
24					
25					

LEGEND
- CEMENT GROUT
- NATIVE BACKFILL
- BENTONITE SEAL
- SAND PACK
- WELL SCREEN
- RISER PIPE
- HS HEAD SPACE
- WATER LEVEL (APPROXIMATE)

GRANULAR SOILS

BLOWS/FT	DENSITY
0-4	V.LOOSE
4-10	LOOSE
10-30	M.DENSE
30-50	DENSE
>50	V.DENSE

COHESIVE SOILS

BLOWS/FT	DENSITY
<2	V.SOFT
2-4	SOFT
4-8	M.STIFF
8-15	STIFF
15-30	V.STIFF
>30	HARD

PROPORTIONS USED

TRACE	0-10%
LITTLE	10-20%
SOME	20-35%
AND	35-50%

NOTES: See Figure 2, Site Plan, for boring location.

THE VERTERRE GROUP, INC
Environmental Scientists and Engineers
The Verterre Group, Inc.®
414 Roosevelt Highway Colchester, Vermont 05446
(802) 654-8663 FAX: (802) 654-8667

MONITORING WELL/SOIL BORING LOG

Project Name: **Simon's Berlin Store**
Location: **1060 Route 302**
Berlin, Vermont
Verterre Project #: **05054**

WELL/
BORING ID:
MW-5/B-104

INSTALL DATE:	September 27, 2006	WELL DEPTH: 22 ft bgs	BORING DEPTH: 22 ft bgs
VERTERRE REP:	Steven Chase	DEPTH TO WATER: (during drilling)	Approximately 16 ft bgs
DRILLING CO:	Environmental Drilling Glens Falls, NY	SCREEN DIA: 2 inch	DEPTH: 12-22 ft bgs
		SCREEN TYPE/SIZE:	0.010"-slot Schedule 40 PVC
DRILLING METHOD:	Auger	RISER TYPE:	40 Schedule PVC
SAMPLING METHOD:	Split Spoon	RISER DIA.: 2 inch	DEPTH: 0-12 ft bgs
REFERENCE POINT (RP):	Top of casing	GUARD TYPE:	Aluminum road box
ELEVATION OF RP:	97.85 ft	RISER CAP:	Locking expansion plug
REMARKS:	Boring completed as a monitoring well.		

DEPTH IN FEET	SAMPLE DEPTH (FT)	PID (PPMV)	BLOWS/6" AND RECOVERY	SOIL DESCRIPTION AND NOTES*
0	0-2	0.9	10" recovery	0-10": Gray silt, dense with some brown sand, medium.
2	2-4	1.9	11" recovery	0-11": Gray silt, dense with some brown sand, medium.
4	4-6	0.7	11" recovery	0-2": Gray silt with some brown sand. 2-11": Fine brown sand.
6	6-8	1.7	17" recovery	0-17": Fine brown sand, small lense of coarse sand, some silt and wood debris.
8	8-10	1.5	14" recovery	0-14": Fine brown sand, trace silt with small cobble.
10	10-12	1.1	14" recovery	0-14": Fine brown silt, trace fine brown sand.
12	12-14	2.3	22" recovery	0-3": Fine brown silt, trace fine sand. 3-12": Fine brown/white sand. 12-22": Medium brown/white sand.
14	14-16	2.1	9" recovery	0-6": Coarse brown/white sand. 6-9": Fine brown sand, some silt, wet
16 ▼	16-18	1.1	9" recovery	0-9": Coarse brown sand, with large cobble, saturated.
18	18-20	0.9	5" recovery	0-5": Coarse brown sand, with large cobble, saturated.
20	20-22	0.7	18" recovery	0-8": Coarse gray sand. 8-18": Dense gray silt, saturated.
22				
24				

LEGEND
- CEMENT GROUT
- NATIVE BACKFILL
- BENTONITE SEAL
- SAND PACK
- WELL SCREEN
- RISER PIPE
- HS HEAD SPACE
- ▼ WATER LEVEL (APPROXIMATE)

GRANULAR SOILS		COHESIVE SOILS	
BLOWS/FT	DENSITY	BLOWS/FT	DENSITY
0-4	V.LOOSE	<2	V.SOFT
4-10	LOOSE	2-4	SOFT
10-30	M.DENSE	4-8	M.STIFF
30-50	DENSE	8-15	STIFF
>50	V.DENSE	15-30	V.STIFF
		>30	HARD

PROPORTIONS USED	
TRACE	0-10%
LITTLE	10-20%
SOME	20-35%
AND	35-50%

NOTES: See Figure 2, Site Plan, for boring location.

ATTACHMENT 1

Laboratory Report

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
LabID: 11112
Date Received: 10/7/06

Project: 05054 Simon's Berlin Store

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Resource Laboratories, LLC Quality Assurance Plan. The Standard Operating Procedures (SOP) are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Resource Laboratories, LLC maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Resource Laboratories, LLC

Susan Sylvester
Principal, General Manager

10-16-06
Date

Total number of pages 9

Resource Laboratories, LLC Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH903		

Lab Number:	11112-01
Sample Designation:	MW-1
Date Sampled:	10/6/06
Date Analyzed:	10/10/06
Matrix:	Water
Instrument Dilution Factor:	1
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	U	2
benzene	U	2
toluene	U	2
ethylbenzene	U	2
m&p-xylenes	U	2
o-xylene	U	2
naphthalene	U	5
1,3,5-trimethylbenzene	U	2
1,2,4-trimethylbenzene	U	2

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	100	78-114
toluene-D8	105	88-110
4-bromofluorobenzene	103	86-115

U = Below quantitation limit

Lab Number:	11112-02
Sample Designation:	MW-2
Date Sampled:	10/6/06
Date Analyzed:	10/10/06
Matrix:	Water
Instrument Dilution Factor:	1
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	61	2
benzene	52	2
toluene	U	2
ethylbenzene	U	2
m&p-xylenes	75	2
o-xylene	U	2
naphthalene	U	5
1,3,5-trimethylbenzene	23	2
1,2,4-trimethylbenzene	51	2

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	105	78-114
toluene-D8	110	88-110
4-bromofluorobenzene	102	86-115

U = Below quantitation limit
Note: The sample pH was greater than 2, indicating inadequate preservation.

Lab Number:	11112-03
Sample Designation:	MW-3
Date Sampled:	10/6/06
Date Analyzed:	10/11/06
Matrix:	Water
Instrument Dilution Factor:	1
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	27	2
benzene	U	2
toluene	U	2
ethylbenzene	U	2
m&p-xylenes	U	2
o-xylene	U	2
naphthalene	U	5
1,3,5-trimethylbenzene	U	2
1,2,4-trimethylbenzene	U	2

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	101	78-114
toluene-D8	100	88-110
4-bromofluorobenzene	94	86-115

U = Below quantitation limit

Lab Number:	11112-04
Sample Designation:	MW-4
Date Sampled:	10/6/06
Date Analyzed:	10/11/06
Matrix:	Water
Instrument Dilution Factor:	5
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	350	10
benzene	170	10
toluene	U	10
ethylbenzene	160	10
m&p-xylenes	1300	10
o-xylene	U	10
naphthalene	88	30
1,3,5-trimethylbenzene	190	10
1,2,4-trimethylbenzene	650	10

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	101	78-114
toluene-D8	99	88-110
4-bromofluorobenzene	97	86-115

U = Below quantitation limit

Lab Number:	11112-05
Sample Designation:	MW-5
Date Sampled:	10/6/06
Date Analyzed:	10/11/06
Matrix:	Water
Instrument Dilution Factor:	1
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	8	2
benzene	U	2
toluene	U	2
ethylbenzene	U	2
m&p-xylenes	U	2
o-xylene	U	2
naphthalene	U	5
1,3,5-trimethylbenzene	U	2
1,2,4-trimethylbenzene	U	2

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	102	78-114
toluene-D8	101	88-110
4-bromofluorobenzene	95	86-115

U = Below quantitation limit

Lab Number:	11112-06
Sample Designation:	Dup-1
Date Sampled:	10/6/06
Date Analyzed:	10/11/06
Matrix:	Water
Instrument Dilution Factor:	1
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	28	2
benzene	U	2
toluene	U	2
ethylbenzene	U	2
m&p-xylenes	U	2
o-xylene	U	2
naphthalene	U	5
1,3,5-trimethylbenzene	U	2
1,2,4-trimethylbenzene	U	2

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	103	78-114
toluene-D8	100	88-110
4-bromofluorobenzene	94	86-115

U = Below quantitation limit

Lab Number:	11112-07
Sample Designation:	F.B.
Date Sampled:	10/6/06
Date Analyzed:	10/10/06
Matrix:	Water
Instrument Dilution Factor:	1
Analyst:	LMM

VOLATILE ORGANICS
SW 846 Method 5030B/8260B

	Concentration ug/L	Quantitation Limit ug/L
methyl t-butyl ether (MTBE)	U	2
benzene	U	2
toluene	U	2
ethylbenzene	U	2
m&p-xylenes	U	2
o-xylene	U	2
naphthalene	U	5
1,3,5-trimethylbenzene	U	2
1,2,4-trimethylbenzene	U	2

SURROGATE STANDARDS	Recovery (%)	Acceptance Limits
dibromofluoromethane	102	78-114
toluene-D8	105	88-110
4-bromofluorobenzene	101	86-115

U = Below quantitation limit

RL Resource Laboratories, LLC
124 Heritage Avenue • Portsmouth, NH 03801
Phone: 603-436-2001 • Fax: 603-430-2100

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

11112

Company Name: The Vesterra Group
Phone #: 802-654-8663
FAX #: 802-654-8667
Company Address: 414 Roosevelt Hwy Ste 200 Colchester, VT 05446
Site Location (City, State): 05054 Simms Berlin Store
Project Manager: Martha Roy
Project ID / Name:
Invoice To: Vesterra
Protocol: RCRA SDWA NPDES MCP NHDES OTHER

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER (Specify)	Sampling: DATE	TIME	SAMPLER
11112-01	MW-1	2	X			X					ICE	10/6/06	1142	RL
-02	MW-2												1139	
-03	MW-3												1144	
-04	MW-4												1134	
-05	MW-5												1137	
-06	Dup-1												1200	
-07	FIB-	V	V			V					V	V	1100	V

ANALYSIS REQUEST

VOC 8260-NH List ☐ MADEP VPH ☐ MEGRO	VOC 8260 ☐ VOC8015GRO ☐ VOC 624	VOC 8260 BTEX, MtBE, Naphthalene only	VOC 524.2 ☐ VOC 524.2 NH List	TPH Fingerprint ☐ MEDRO ☐ DRO 8015 ☐ EPH	8270PAH ☐ 8270ABN ☐ 625	8082 PCB ☐ 8081 Pesticides ☐ 608	O&G 1664 ☐ O&G SM5520F	pH ☐ BOD ☐ Conductivity	TSS ☐ TDS ☐ TS	RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals	Total Metals-list ☐ Dissolved Metals-list	Ammonia ☐ COD	T-Phosphate ☐ Phenol	Cyanide ☐ Sulfide	Nitrate ☐ Nitrite ☐ Ortho P ☐ Sulfate ☐ Bromide ☐ Chloride	Corrosivity ☐ Reactive CN ☐ Reactive S- ☐ Ignitibility/FP	TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC	TCLP Pesticide ☐ TCLP Herbicides (subcontract)	Standard Drinking Water Test ☐ Bacteria P/A	8260B			Grab (G) or Composite (C)
																		X				G
																		V				V

TAT REQUESTED
Priority (24 hr) ☐
Expedited (48 hr) ☐
10 Business Days ☐
Other ☐

E-Mail Address:
Quote # 5325
PO #

SPECIAL INSTRUCTIONS

REPORTING INSTRUCTIONS
☐ FAX ☐ OTHER (specify)
☐ PDF ☐ Excel Spreadsheet

RECEIVED ON ICE ☑ YES ☐ NO
TEMPERATURE ____ °C

Lab Use Only

CUSTODY RECORD

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
		10/6/06	1476			
	Relinquished by:	Date	Time	Received by:	Date	Time
	Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
				Way Bill#: VIA UPS	10/7/06	1430